

m. Worn or damaged primary drive gear.

5. A rapid on-off squeal may indicate a compression leak around the cylinder head gasket or spark plug.

CYLINDER LEAK DOWN TEST

A cylinder leak down test can determine if an engine problem is caused by leaking valves, a blown head gasket, or broken, worn or stuck piston rings. Perform a cylinder leak down test by applying compressed air to the cylinder and then measuring the percent of leakage. A cylinder leak down tester and an air compressor are required to perform this test (**Figure 21**). Follow the tester manufacturer's directions along with the following information when performing a cylinder leak down test.

- 1. Start and run the engine until it reaches normal operating temperature. Then turn the engine off.
- 2. Remove the air filter assembly as described in Chapter Three. Open and secure the throttle in the wide-open position.
- 3. Remove the spark plug.
- 4. Position the piston at TDC on the compression stroke. See *Valve Clearance Check and Adjustment* in Chapter Three.

NOTE

The engine may turn when air pressure is applied to the cylinder. To prevent this from happening, shift the transmission into fifth gear and set the parking brake.

- 5. Connect the cylinder leak down tester into the spark plug hole (**Figure 22**).
- 6. Make a cylinder leak down test following the tester manufacturer's instructions. Listen for air leaking while noting the following:
 - a. Air leaking through the exhaust pipe indicates a leaking exhaust valve.
 - b. Air leaking through the carburetor indicates a leaking intake valve.
 - c. Air leaking through the crankcase breather tube indicates worn piston rings.
- 7. A cylinder with 10% or more cylinder leakage requires further service.
- 8. Remove the tester and reinstall the spark plug.

CLUTCH

All clutch service, except adjustment, requires partial engine disassembly to identify and fix the problem. Refer to Chapter Six.

The TRX350 uses two clutch assemblies: centrifugal (A, **Figure 23**) and change (B).

Clutch Slipping

- 1. Clutch wear or damage:
 - a. Incorrect clutch adjustment.
 - b. Worn clutch shoe (centrifugal clutch).
 - c. Loose, weak or damaged clutch spring (change and centrifugal clutch).
 - d. Worn friction plates (change clutch).
 - e. Warped steel plates (change clutch).
 - f. Worn clutch center and/or clutch outer (change clutch).
 - g. Incorrectly assembled clutch.
- 2. Engine oil:
 - a. Low oil level.
 - b. Oil additives.
 - c. Low viscosity oil.

Clutch Dragging

1. Clutch wear or damage:

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